

Local Hazard Mitigation Plan ANNEX

City of Morgan Hill

Introduction

The City of Morgan Hill is a small, semi-rural city in Santa Clara County, California. The City has a population of 36,428 people, based on the 2005 California State Department of Finance Population Unit figures. The City's total 2004/2005 operating and CIP budget was \$83,762,784. The City of Morgan Hill employs 181.50 people. While the City provides local police services, the fire services are supplied by Santa Clara County Fire and California Department of Forestry.

The Planning Process

This process of preparing this plan was familiar to the City of Morgan Hill. The City has a Safety Element to its General Plan last updated in 2000 that includes a discussion of fire, earthquake, flooding, and landslide hazards. In addition, the City routinely enforces the requirements of the California Environmental Quality Act (CEQA) requirements (which, since 1988, have required mitigation for identified natural hazards). The City's effort has focused on building on these pre-existing programs and identifying gaps that may lead to disaster vulnerabilities in order to work on ways to address these risks through mitigation.

Many of the activities conducted by the City of Morgan Hill were fed into the planning process for the multi-jurisdictional plan. The City participated in various ABAG workshops and meetings, including the general "kick-off" meeting and the soft-story charrette. In addition, the City has provided written and oral comments on the multi-jurisdictional plan. Finally, the City provided information on facilities that are viewed as "critical" to ABAG.

Key City staff met on two occasions to identify and prioritize mitigation strategies appropriate for the City. Staff involved in these meetings included the City Manager, Planning Director, Building Official, Assistant to the City Manager, Public Works Director, Finance Director, Director of Parks and Recreation, City Attorney, Police Chief and Emergency Services Manager. At the first meeting, the general priorities and appropriate City departments were identified.

The second meeting discussed preliminary budgets and potential funding sources for strategies designed as "High" priority. The City provided the opportunity for the public to comment on the DRAFT mitigation strategies selected by City staff at the City Council meeting on August 24, 2005. The resolution adopting the plan and mitigation strategies was placed on the City Council agenda for approval on October 26, 2005.

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). These hazards also impact this community, except for surface faulting. Surface faulting is not a hazard in the City of Morgan Hill because no active faults are located in the City.

While the City of Morgan Hill has undertaken a number of general hazard mapping activities since the first Safety Element was prepared by the City, all of these maps are less detailed and are not as current as those shown on the ABAG website at <http://quake.abag.ca.gov/mitigation/>.

The City has had a number of earthquakes that have caused property damage and injury including one that caused 27 injuries and 7.2 million dollars in damage in 1984. In 1989, the Loma Prieta Quake caused 727 million dollars in damage to Santa Clara County along with numerous injuries and deaths. This additional hazard information was included at the City Council meeting held on October 26, 2005.

Information on disasters declared in Santa Clara County since 1950 may be researched at <http://quake.abag.ca.gov/mitigation/disaster-history.html>.

The City examined the hazard exposure of City urban land based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 4,867 urban acres in the City, the following areas represent potential hazards:

- ◆ Earthquake faulting – No active faults run within the city so rupture of a fault is not a direct concern.
- ◆ Earthquake shaking – 3,900 acres are in the second highest category of shaking potential, in large part because the Central Claveras fault runs next to the eastern portion of the City in forest land area.
- ◆ Earthquake-induced landslides – the California Geological Survey has not completed mapping of this hazard in the City of Morgan Hill. However, because few areas have been mapped as landslides, this hazard is viewed as similar to that posed by weather-related hazards.
- ◆ Earthquake liquefaction – 1,392 acres are in areas of moderate, high, or very high liquefaction susceptibility.
- ◆ Tsunamis – While tsunamis may be a hazard in the City of Morgan Hill, the mapping of the inundation area has not been completed at this time.
- ◆ Flooding – 257 acres are in the 100-year flood plain, while an additional 5,277 acres are in the 500 year flood plan or other flood-prone areas.
- ◆ Landslides – 326 acres are in areas of existing landslides.
- ◆ Wildfires – 1014 acres are subject to high or very high wildfire threat because of the semi-rural nature of the City. Accordingly, 391 acres are in wildland-urban interface threat areas.

- ◆ Dam Inundation – 4,268 acres are subject to dam inundation.
- ◆ Drought – all 7,597 acres are subject to drought.

The City also examined the hazard exposure of infrastructure based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 154 miles of roadway in the City the following areas are potential hazards:

- ◆ Earthquake faulting – No active faults run within the city so rupture of a fault is not a direct concern.
- ◆ Earthquake shaking – 83 miles of roadway are in the highest two categories of shaking potential.
- ◆ Earthquake-induced landslides – the California Geological Survey has not completed mapping of this hazard in the City of Morgan Hill. However, 3 miles of roadway are listed in earthquake induced landslide area.
- ◆ Earthquake liquefaction – 32 miles of roadway are in areas of moderate, high, or very high liquefaction susceptibility. 27 miles are moderate and 1 mile is very high.
- ◆ Tsunamis – While tsunamis may be a hazard in the City of Morgan Hill, the mapping of the inundation area has not been completed at this time.
- ◆ Flooding – 7 miles of roadway are in the 100-year flood plain, while an additional 108 miles are in the 500- year flood plain and other flood-prone areas.
- ◆ Landslides – 3 miles of roadway are in some areas of existing landslides.
- ◆ Wildfires – 14 miles of roadway are subject to high or very high wildfire threat, 4 miles of roads very high threat areas. 120 miles of roadway are in wildland-urban interface threat areas.
- ◆ Dam Inundation – 100 miles of roadway are in an area subject to dam inundation.
- ◆ Drought – is not a hazard for roadways.

Finally, the City examined the hazard exposure of critical health care facilities, schools, and city-owned buildings based on the information on ABAG's website at:
<http://quake.abag.ca.gov/mitigation/pickcrit.html>.

- ◆ Earthquake faulting – No active faults run within the city so rupture of a fault is not a direct concern.
- ◆ Earthquake shaking – All 13 schools are in the moderate to second highest shaking potential areas. All 83 City –owned and 73 County owned critical facilities are in the moderate to second highest shaking areas. 2 healthcare facilities are in the moderate shaking areas.
- ◆ Earthquake-induced landslides – the California Geological Survey has not completed mapping of this hazard in the City of Morgan Hill. However, 3 City-Owned and 3 County -owned facilities are currently listed in existing landslide areas.
- ◆ Earthquake liquefaction – 2 critical health care facilities and two long term care facilities are located in low or very low liquefaction susceptibility areas. 4 City-owned and 2 County-owned critical facilities are in areas of very high liquefaction susceptibility. 4 schools are located in moderate liquefaction areas as well as 4 locally owned bridges and interchanges.

- ◆ Tsunamis – While tsunamis may be a hazard in the City of Morgan Hill, including to critical facilities, the mapping of the inundation area has not been completed at this time.
- ◆ Flooding – 7 City-owned, 2 County-owned and one special district critical facility are in either the 100-year flood plain or in other flood-prone areas. 58 critical facilities and all 13 schools are in the 500 -year flood plain.
- ◆ Landslides – 18 city-owned and 1 County owned critical facility are in areas of existing landslides.
- ◆ Wildfires – 2 healthcare facilities, 12 schools 53, City-owned and 48 County-owned critical facilities are within the wildland-urban interface threat areas. 6 locally owned bridges and interchanges are also in this area.
- ◆ Dam Inundation – 10 schools, 38 City owned, 4 County-owned critical facilities and 5 special district facilities are in an area subject to dam inundation. 6 locally- owned and 3 State-owned bridges and interchanges are also in dam inundation areas.
- ◆ Drought – Drought will not affect city buildings directly. However, the city does operate a water-supply distribution system.

Some sectors of the City of Morgan Hill are located in flood-prone areas. Accordingly, there is one repetitive loss property based on the 100-year flood plain and 3 repetitive property losses based on the 500-year flood plain based on the information at:

<http://quake.abag.ca.gov/mitigation/pickflood.html>.

The City plans to work with ABAG during 2005 to improve the risk assessment information being compiled by ABAG by providing information on unreinforced masonry buildings and soft-story apartments located in the City.

Drought, though a potential problem in the City, is not fully assessed. The City will work with ABAG and various water supply agencies on this issue.

The City plans to work with ABAG to develop specific information about the kind and level of damage to buildings, infrastructure, and critical facilities which might result from any of the hazards previously noted. The ABAG Annex states that ABAG will be doing this work in 2005 through early 2006.

As these impacts are not fully developed, the City has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes (particularly shaking), flooding (including dam failure), wildfire, and landslides (including unstable earth) pose a significant risk for potential loss.

Mitigation Activities and Priorities

As a participant in the ABAG multi-jurisdictional planning process, City of Morgan Hill staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was discussed at a meeting of the City Police Chief, Building Official, Public Works Director, Planning Director, and Assistant City Manager on March 24, 2005.

In addition, representatives of the fire district and school district were contacted regarding mitigation strategies and priorities. At the meeting, all of the mitigation strategies were reviewed. The tentative decision on priority was made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage.

Over time, we are committed to developing better hazard and risk information to use in making those trade-offs. We are not trying to create a disaster-proof region, but a disaster-resistant one. In addition, several of the strategies are existing City of Morgan Hill programs.

These draft priorities were submitted to the City Manager for review. The draft priorities were then provided to the City Council on August 24, 2005. The public was provided with an opportunity to comment on the DRAFT priorities at that time.

The Plan Maintenance and Update Process

The City Manager's Office will ensure that *monitoring* of this Annex will occur. The plan will be monitored on an on-going basis. However, the major disasters affecting our community, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Annex will be a discussion item on the agenda of the meeting of City Senior Executives at least once a year in April. At that meeting, the department heads will focus on *evaluating* the Annex in light of technological and political changes during the past year or other significant events. The Senior Executive group will be responsible for determining if the plan should be updated.

The City of Morgan Hill is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The City Community Development Director will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the City of Morgan Hill again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including the County's Office of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The *public* will continue to be involved whenever the plan is updated and as appropriate during the monitoring and evaluation process. Prior to adoption of updates, the City will provide the opportunity for the public to comment on the updates. A public notice will be posted prior to the meeting to announce the comment period and meeting logistics.